CLAIMS:

1. A stent formed of an alloy comprising at least one noble metal and at least one active metal, said stent formed by a process comprising the step of submerging said stent in an electrolytic acidic bath said bath connected to a power supply and said bath comprising at least one solvating agent having at least one sulfur ion and subjecting said stent to a multiple pulse waveform.

2. The stent of claim 1 wherein said complexing agent comprises at least one member selected from the group consisting of thiourea or derivatives thereof, thiocarboxylic acids, thiouronium salts and mixtures thereof.

3. The stent of claim 1 wherein said acidic bath further comprises at least one halide in the form of a salt or an acid.

4. The stent of claim 3 wherein said halide is an alkali metal halide, an alkaline earth halide, a transition metal halide, a hydrogen halide or mixture thereof.

5. The stent of claim 3 wherein said halide is selected from the group consisting of potassium chloride, magnesium chloride, sodium chloride, calcium chloride, hydrogen chloride, ferric chloride and mixtures thereof.

6. The stent of claim 1 wherein said acid bath comprises phosphoric acid, sulfuric acid, hydrochloric acid, hydrofluoric acid, tetrafluoroboric acid, or a mixture thereof.

7. The stent of claim 1 wherein said at least one noble metal is palladium, rhodium, iridium, ruthenium, rhenium, gold, silver, copper, osmium, platinum or mixtures thereof.

8. The stent of claim 1 wherein said noble metal is platinum.

9. The stent of claim 1 wherein said at least one active metal is a transition metal.

10. The stent of claim 9 wherien said at least one active transition metal is chromium, titanium, tantalum, tungsten, niobium, zirconium or mixtures thereof.

11. The stent of claim 9 wherein said at least one active metal is chromium.

12. The stent of claim 8 said alloy comprising about 2 wt-% to about 70 wt-% platinum.

13. The stent of claim 8 said alloy comprising about 5 wt-% to about 50 wt-% platinum.

14. The stent of claim 8 said alloy further comprising about 10 wt-% to about 20 wt-% chromium.

15. The stent of claim 8 said alloy further comprising about 5 wt-% to about 15 wt-% nickel.

16. The stent of claim 8 said alloy further comprising about 10 wt-% to about 40 wt-% iron.

17. The stent of claim 1 formed from an alloy comprising:

a) about 2 wt-% to about 70 wt-% platinum;

b) about 10 wt-% to about 40 wt-% iron;

c) about 10 wt-% to about 20 wt-% chromium; and

d) about 5 wt-% to about 15 wt-% nickel.

18. The stent of claim 1 formed from an alloy comprising:

a) about 11 wt-% to about 18 wt-% chromium;

b) about at least about 15 wt-% iron;

c) about 5 wt-% to about 12 wt-% nickel; and

d) about 2 wt-% to about 50 wt-% platinum.

19. The stent of claim 1 wherein said multiple pulse waveform is a periodic reverse multiple pulse waveform.

20. The stent of claim 1 wherein said multiple pulse waveform comprising at least one first period comprising a positive voltage of about +3.5 to about 4.0 Volts SCE and at least one second period comprising a negative voltage of about -0.6 to about -0.8 Volts SCE.

21. The stent of claim 20 wherein said at least one first period is from about 1 millisecond to about 1 second and said at least one second period is from about 4 ms to about 10 seconds.

22. The stent of claim 20, said multiple pulse waveform further comprising at least one period of rest.

23. The stent of claim 22 wherein said period of rest follows at least one period comprising a negative voltage and before at least one period comprising a positive voltage or said period of rest follows at least one period comprising a positive voltage and before at least one period comprising a negative voltage.

24. The stent of claim 22 wherein said period of rest is about 100 ms or less.

25. The stent of claim 22 wherein said period of rest is about 10 ms or less.

26. The stent of claim 20 wherein said multiple pulse waveform comprises at least two periods comprising a positive voltage of about 3.5 to about 5.0 Volts SCE and at least two period comprising a negative voltage of about -0.6 to about -0.8 Volts SCE.

27. The stent of claim 26, said multiple pulse waveform further comprising at least one period of rest following at least one period comprising a negative voltage and before

at least one period comprising a positive voltage or following at least one period comprising a positive voltage and before at least one period comprising a negative voltage.

28. The stent of claim 27 wherein said at least one period of rest is about 10 ms or less.

29. The stent of claim 20 wherein said multiple pulse waveform comprises at least one period comprising an anodic current of about 400 mAMps to about 600 mAmps and at least one period comprising a cathodic current of about 200 mAmps to about 600 mAmps.

30. The stent of claim 20 wherein said multiple pulse waveform comprises at least two periods comprising an anodic current of about 400 mAmps to about 600 mAmps and at least two periods comprising a cathodic current of about 200 mAmps to about 600 mAmps.

31. The stent of claim 29 wherein said multiple pulse waveform further comprises at least one period of rest.

32. The stent of claim 30 wherein said multiple pulse waveform comprises at least two periods of rest.

33. The stent of claim 1 wherein said multiple pulse waveform has a frequency of about 2 Hz to about 50 Hz.

34. The stent of claim 1 wherein said power supply is a run in a constant current.

35. The stent of claim 34 wherein said power supply is outputting a constant voltage.

36. A method of cleaning or electropolishing a stent, said method comprising the step of submersing said stent in an electrolytic bath said bath connected to a power supply and said bath comprising at least one chelating or complexing agent having at least one sulfur atom and applying a multiple pulse waveform to said bath.

37. The method of claim 36 wherein said chelating or complexing agent comprises at least one member selected from the group consisting of thiourea or derivatives thereof, thiocarboxylic acids, thiouronium salts and mixtures thereof.

38. The method of claim 36 wherein said multiple pulse waveform is a periodic reverse multiple pulse waveform.

39. The method of claim 36 wherein said acidic bath comprises sulfuric acid, phosphoric acid, hydrochloric acid, hydrofluoric acid, tetrafluoroboric acid or mixtures thereof.

40. The method of claim 36 wherein said acidic bath further comprising at least one alkali metal halide, alkaline earth metal halide, transition metal halide, hydrogen halide or mixture thereof.

41. The method of claim 40 wherein said halide is selected from the group consisting of potassium chloride, sodium chloride, calcium chloride, hydrogen chloride, ferric chloride and mixtures thereof.

42. The method of claim 36 further comprising the step of submersing said stent in an aqueous mixture comprising nitric acid, fluoroboric acid or a derivative thereof, or mixtures thereof before cleaning or electropolishing.

43. The method of claim 36 wherein said multiple pulse waveform comprises at least one first period comprising a positive voltage of about 3.5 Volts SCE to about 4.0 Volts SCE and at least one second period comprising a negative voltage of about -0.6 Volts SCE to about -0.8 Volts SCE.

44. The method of claim 43 wherein said first period is from about 2 milliseconds to about 1 second and said second period is from about 4 milliseconds to about 10 seconds

45. The method of claim 43 wherein said multiple pulse waveform further comprises at least one period of rest.

46. The method of claim 45 wherein said at least one period of rest is about 100 milliseconds or less.

47. The method of claim 45 wherein said at least one period of rest is about 10 milliseconds or less.

48. The method of claim 45 wherein said at least one period of rest is following at least one period comprising a negative voltage and before at least one period comprising a positive voltage or following at least one period comprising a positive voltage and before at least one period comprising a negative voltage.

49. The method of claim 36, said multiple pulse waveform comprising at least two periods comprising a positive voltage of about 3.5 Volts SCE to about 4.0 Volts SCE and at least two periods comprising a negative voltage of about -0.6 Volts SCE to about -0.8 Volts SCE.

50. The method of claim 49 wherein each of said at least two periods comprising a positive voltage is from about 2 milliseconds to about 1 second and each of said at least two periods comprising a negative voltage is from about 4 milliseconds to about 10 seconds.

51. The method of claim 50 wherein said multiple pulse waveform further comprises at least one period of rest.

52. The method of claim 50 wherein said multiple pulse waveform comprises at least two periods of rest.

53. The method of claim 51 wherein said at least one period of rest is about 100 milliseconds or less.

54. The method of claim 51 wherein said at least one period of rest is about 10 milliseconds or less.

55. The method of claim 51 wherein said at least one period of rest is after a period comprising a negative voltage and before a period comprising a positive voltage or said at least one period of rest is after a period comprising a positive voltage and before a period comprising a negative voltage.

56. The method of claim 36 wherein said multiple pulse waveform comprises at least one period comprising an anodic current of about 400 mAMps to about 600 mAmps and at least one period comprising a cathodic current of about 200 mAmps to about 600 mAmps.

57. The method of claim 36 wherein said multiple pulse waveform comprises at least two periods comprising an anodic current of about 400 mAmps to about 600 mAmps and at least two periods comprising a cathodic current of about 200 mAmps to about 600 mAmps.

58. The method of claim 56 further comprising at least one period of rest.

59. A method of cleaning or electropolishing a stent formed from an alloy comprising at least one noble metal and at least one non-noble metal, the method comprising the steps of:

a) providing a tubular member;

b) laser cutting a stent pattern in said tubular member to form a stent:

c) electropolishing said stent in an aqueous acidic mixture comprising at least one chelating or complexing agent; and

d) subjecting said acidic bath to a multiple pulse waveform.

60. The method of claim 59, said chelating agent comprising at least one sulfur atom.

61. The method of claim 59 further comprising the step of soaking said stent in an acidic mixture of fluoroboric and nitric acids.

62. The method of claim 59 further comprising the step of etching said stent in an electrolytic acidic bath comprising at least one chelating or complexing agent having at least one sulfur ion before said electropolishing step.

63. The method of claim 59 wherein said multiple pulse waveform is a periodic reverse multiple pulse waveform.